

WHAT IS CLAIMED IS:

5        Claim 1. A fence insulator for maintaining a pair of fence wires in a desired common plane and spaced a desired distance apart, the insulator comprising a body of molded plastic construction mountable to a support and including a pair of spaced apart sidewalls connected by a connecting wall; a first pair of aligned grooves defined across a first portion of the connecting wall; a first retention member positioned adjacent the first pair of aligned grooves and configured for receiving one of the wires underneath a portion thereof; a second pair of aligned grooves defined across a second portion of the connecting wall spaced apart from and substantially parallel to the first pair of aligned grooves; and a second retention member positioned adjacent the second pair of aligned grooves and configured for receiving one of the wires underneath a portion thereof, wherein one of the wires is positionable underneath the first retention member and within the first pair of aligned grooves and the other one of the wires is positionable underneath the second retention member and within the second pair of aligned grooves.

5        Claim 2. The fence insulator of claim 1, wherein the first retention member comprises a pair of oppositely disposed fingers located adjacent the first portion of the connecting wall and spaced interior the first pair of grooves, and the second retention member comprises a pair of oppositely disposed fingers located adjacent the second portion of the connecting wall and spaced interior the second pair of grooves.

5      Claim 3. The fence insulator of claim 1, wherein the first retention member comprises a first flexible tab defined adjacent the first portion of the connecting wall with an underlying cutout defined within the first portion of the connecting wall, and the second retention member comprises a second flexible tab defined adjacent the second portion of the connecting wall with an underlying cutout defined within the second portion of the connecting wall, wherein the first and second flexible tabs open in opposite directions toward a middle portion of the connecting wall.

Claim 4. The fence insulator of claim 1, further comprising arms extending from edges of the body, the arms spaced apart and configured to snap fit around a post.

Claim 5. The fence insulator of claim 1, further comprising mounting members comprising substantially planar portions extending from opposite locations of the body in substantially opposite directions for mounting the insulator to a support surface.

Claim 6. The fence insulator of claim 5, wherein the mounting members extend from opposite sides of the body.

Claim 7. The fence insulator of claim 5, wherein the mounting members extend from opposite ends of the body.

Claim 8. The fence insulator of claim 1, further comprising one or more discontinuities defined on the body for reducing the likelihood of electrical communication between the wires when they are installed on the insulator.

5      Claim 9. A fence insulator for maintaining a pair of fence wires in a desired common plane and spaced a desired distance apart, the insulator comprising an elongate body of molded plastic construction mountable to a support and including a wire mounting face; a first retention member positioned adjacent the wire mounting face and configured for receiving one of the wires underneath a portion thereof; and a second retention member configured for receiving the other one of the wires underneath a portion thereof and located adjacent the wire mounting face and longitudinally spaced apart from the first retention member.

5      Claim 10. The fence insulator of claim 9, wherein the first retention member comprises a first rigid tab with an underlying first cutout defined within a first portion of the wire mounting face, and the second retention member comprises a second rigid tab with an underlying second cutout defined within a second portion of the wire mounting face, wherein the first and second rigid tabs open in the same direction toward an end of the insulator.

Claim 11. The insulator of claim 10, wherein the first rigid tab includes a projection on a surface thereof facing the first cutout , and the second rigid tab includes a projection on a surface thereof facing the second cutout.

Claim 12. The fence insulator of claim 9, wherein the first retention member comprises a pair of oppositely disposed fingers, and the second retention member comprises a pair of oppositely disposed fingers.

Claim 13. The fence insulator of claim 9, wherein the first retention member comprises a first flexible tab, and the second retention member comprises a second flexible tab, wherein the first and second flexible tabs open in opposite directions toward a middle portion of the mounting face.

Claim 14. The fence insulator of claim 9, further comprising arms extending from edges of the body, the arms spaced apart and configured to snap fit around a post.

Claim 15. The fence insulator of claim 9, further comprising mounting members comprising substantially planar portions extending from opposite locations of the body in substantially opposite directions for mounting the insulator to a support surface.

Claim 16. The fence insulator of claim 15, wherein the mounting members extend from opposite sides of the body.

Claim 17. The fence insulator of claim 15, wherein the mounting members extend from opposite ends of the body.

Claim 18. The fence insulator of claim 9, further comprising one or more discontinuities defined on the body for reducing the likelihood of electrical communication between the wires when they are installed on the insulator.

Claim 19. A fence insulator for installation at corners of a fence or other locations where first and second spaced apart fence wires undergo an abrupt change of direction, the insulator comprising an elongate body of molded plastic construction mountable to a support and including a wire mounting face; a first rigid tab positioned adjacent the wire mounting face and having an opening for passage of the first wire and a curved closed end configured for bearing against the first wire to provide a radius for the first wire to curve around to reduce stresses on the first wire as it undergoes a relatively abrupt change of direction; and a second rigid tab positioned adjacent the wire mounting face longitudinally spaced apart from the first tab and having an opening for passage of the second wire and a curved closed end configured for bearing against

the second wire to provide a radius for the second wire to curve around to reduce stresses on the second wire as it undergoes a relatively abrupt change of direction.

Claim 20. The fence insulator of claim 19, wherein the first rigid tab includes a projection on a surface thereof facing the wire mounting surface , and the second rigid tab includes a projection on a surface thereof facing the wire mounting surface.

Claim 21. The fence insulator of claim 19, further comprising one or more discontinuities defined on the body for reducing the likelihood of electrical communication between the wires when they are installed on the insulator.

Claim 22. A fence system, comprising a current carrying wire connectable to a source of electric current, a ground wire, and a unitary insulator configured to receive the current carrying wire and the ground wire and to maintain the wires in a spaced apart and electrically isolated orientation.

Claim 23. The fence system of claim 23, wherein the insulator comprises the insulator of claim 1.

Claim 24. The fence system of claim 23, wherein the insulator comprises the insulator of claim 9.

Claim 25. The fence system of claim 23, wherein the insulator comprises the insulator of claim 19.